

Appl. No. : 10/827,074
Filed : April 19, 2004

AMENDMENTS TO THE CLAIMS

Please amend the Claim 1 as follows. Insertions are shown underlined while deletions are ~~struck through~~. Please add new claim 20. Please cancel claim 3.

1 (currently amended): An electrode for an electrochemical cell which comprises a cathode containing a proton-conducting compound as an electrode active material, an anode containing a proton-conducting compound as an electrode active material and an electrolyte containing a proton source, comprising a proton-conducting compound and an anion-exchange resin, wherein the anion-exchange resin is a fiber.

2 (original): The electrode for an electrochemical cell as claimed in Claim 1, wherein the proton-conducting compound is a compound capable of storing electrochemical energy by a redox reaction with ions of the electrolyte.

3 (cancelled):

4 (original): The electrode for an electrochemical cell as claimed in Claim 1, wherein the anion-exchange resin is a fiber with a length of 10 mm or less and a major axis of 100 μ m or less.

5 (original): The electrode for an electrochemical cell as claimed in Claim 1, wherein the anion-exchange resin is a fiber made of polyvinyl alcohol having an anion-exchanging group.

6 (original): The electrode for an electrochemical cell as claimed in Claim 1, comprising the anion-exchange resin in 0.01 to 60 wt% to the electrode active material.

7 (original): The electrode for an electrochemical cell as claimed in Claim 1, wherein the electrolyte is an electrolytic solution containing a proton-ionizing electrolyte.

8 (original): The electrode for an electrochemical cell as claimed in Claim 1, wherein the anion-exchange resin is homogeneously dispersed in the electrode.

9 (original): The electrode for an electrochemical cell as claimed in Claim 1, wherein the anion-exchange resin is contained only in the surface layer of the electrode.

10 (original): An electrochemical cell which comprises a cathode containing a proton-conducting compound as an electrode active material, an anode containing a proton-conducting compound as an electrode active material and an electrolyte containing a proton source, wherein at least one of the cathode and the anode is the electrode as claimed in Claim 1.

Appl. No. : **10/827,074**
Filed : **April 19, 2004**

11 (original): An electrochemical cell which comprises a cathode containing a proton-conducting compound as an electrode active material, an anode containing a proton-conducting compound as an electrode active material and an electrolyte containing a proton source, wherein the cathode is the electrode as claimed in Claim 1.

12 (original): The electrochemical cell as claimed in Claim 10, wherein the electrochemical cell is operable such that as a charge carrier, protons are exclusively involved in a redox reaction of the active materials associated with charge/discharge in both electrodes.

13 (original): The electrochemical cell as claimed in Claim 10, wherein the electrolyte is an acid-containing aqueous solution.

14 (original): A storage device comprising an electrochemical cell which comprises a cathode containing a proton-conducting compound as an electrode active material, an anode containing a proton-conducting compound as an electrode active material and an electrolyte containing a proton source,

wherein at least one of the electrodes in the electrochemical cell is the electrode as claimed in Claim 1, and

wherein a plurality of the electrochemical cells are electrically connected.

15 (original): A storage device comprising an electrochemical cell which comprises a cathode containing a proton-conducting compound as an electrode active material, an anode containing a proton-conducting compound as an electrode active material and an electrolyte containing a proton source,

wherein the cathode in the electrochemical cell is the electrode as claimed in Claim 1, and

wherein a plurality of the electrochemical cells are electrically connected.

16 (original): The storage device as claimed in Claim 14, wherein the electrochemical cells are connected in series.

17 (original): The storage device as claimed in Claim 16, wherein the electrochemical cells are stacked.

18 (original): The storage device as claimed in Claim 14, wherein the electrochemical cell is operable such that as a charge carrier, protons are exclusively involved in a redox reaction of the active materials associated with charge/discharge in both electrodes.

Appl. No. : **10/827,074**
Filed : **April 19, 2004**

19 (original): The storage device as claimed in Claim 14, wherein the electrolyte in the electrochemical cell is an acid-containing aqueous solution.

20 (new): The electrochemical cell according to Claim 10, wherein the electrolyte is an aqueous solution containing a proton-ionizing electrolyte.